

QM 100 Long-Distance Microscope (#30003)



The QM 100 combines the compactness and ease of use of the QM 1 with the relative aperture and resolution of the larger microscopes. For applications requiring high magnification and resolution, and which allow the user to work from distances of 15 cm. to 35 cm., the QM 100 is uncontested in performance and flexibility.

Specifications

Type: Maksutov Cassegrain Catadioptric

Working Range: 15 cm (6 inches) to 35 cm (14 inches), subject plane to front element.

 Numerical Aperture:
 Working Distance
 N.A.
 f/no

 33.5 cm (14 inches)
 .083
 6.0

 25.4 cm (10 inches)
 .115
 4.3

15 cm (6 inches) .142 3.5

Resolution: 1.1 microns at 15 cm (6 inches).

Magnification: To 34 times at image plane.

Format: Diffraction Limited Field 12 mm.

Optics

Corrector Lens: BK7, Magnesium Fluoride Coated, 63 mm (2.5 inch) diameter.

Primary Mirror: Pyrex, Aluminum Coated, SiO overcoated 104 mm (4.1 inch) diameter. Secondary Mirror: R1 Surface of Corrector, Aluminum Coated, 16 mm (.63 inch) diameter.

Baffling: Helical in central tube, all interior surfaces anti-reflection coated.

Mechanical

Barrel: Aluminum, machined from seamless stock, threaded lens cell black anodized.

Length 32 cm (12.6 inches), outside diameter 11.4 cm (4.5 inches), weight 2.27 kg (5 lbs).

Rear Closure Plate: Aluminum with stainless steel main tube holder plate, adjustable centering.

Focusing Mechanism: Mirror thimble integral with stainless steel sliding tube. Slides on fixed, stainless steel light

baffle tube (centerless ground). Conical s.s. spring loaded Focus rod s.s. 303, precision

ground, 24 TPI; integrated inside control box.

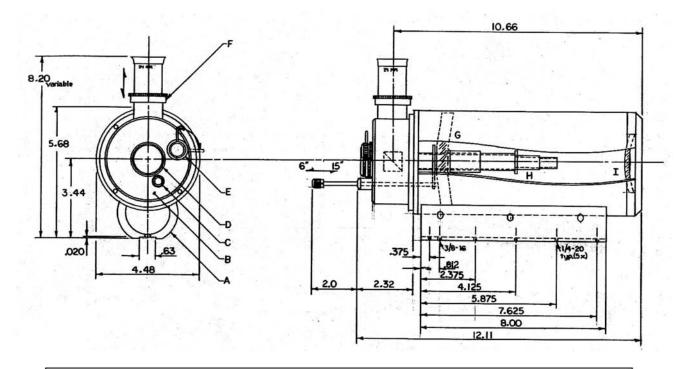
Control Box: Machined aluminum, selectable axial or 90û port. Internal beamsplitter standard flickknob

controlled.

Knobs: Aluminum, 24S-T4, corrosion resistant, stainless steel shafts and levers.

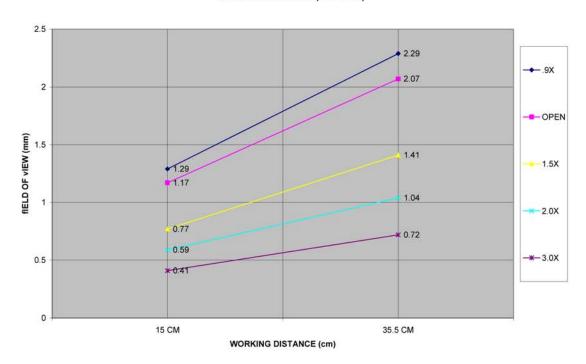
Mount: Full barrel length, 1/4" - 20 and 3/8" -16 mounting holes.

^{*} Specifications subject to change without notice.



- A TRIPOD MOUNT
- B-CONTROL BOX
- C FOCUS KNOB & BUSHING
- D AXIAL PHOTOGRAPHIC PORT
- E BEAM SPLITTER ACTUATION KNOB
- F DIOPTER ADAPTER AND EYEPIECE (REMOVE TO INSTALL TARGET LIGHT)
- G PRIMARY MIRROR AND FOCUS ASSEMBLY
- H MAIN TUBE AND BAFFLE ASSEMBLY
- I CORRECTOR AND LENS CELL

QM100 Field of View (2/3" CCD)



Company Seven
Box 2587
Montpelier, Maryland 20709-2587
USA

Telephone: 301-953-2000

Email: info@company7.com Web: www.company7.com